AMENDMENTS TO THE SPECIFICATION:

Please amend paragraph [0001] beginning on page 1, as follows:

[0001] This application contains subject matter related to co-pending Application Attorney Docket Number DP-309795 / U.S. Application Serial Number ~~XX/XXX,XXX~~ 10/763,910 filed ~~Month, Date, YEAR~~ 23 January 2004.

Please amend paragraph [0007] beginning on page 3, as follows:

[0007] Conventional SSA systems, such as the SSA system 100, may employ several switches in a multitude of possible configurations or states. For example, an SSA system that has 24 switches, each of which can be placed in an open state or a closed state, can assume any of 16,777,216 (2^{24}) configurations or states. Assuming that selecting a potential switch state, setting the selected switch state, and evaluating the performance of the SSA using the set switch state takes 1 ms, the total time to investigate all 16,777,216 configurations to select an optimal configuration is 50,331.6 seconds, or approximately 13.98 hours. During this time, the SSA system loses acceptable signal reception. Search time associated with selecting a switch configuration for a conventional SSA system may be reduced by incorporating a memory device with the conventional SSA structure. The memory device as discussed above is described in currently pending and related patent application serial number ~~XX/XXX,XXX~~ 10/763,910 and invention record file number DP-309795 by the same inventor of the present invention. Essentially, the memory device evaluates a reduced number of the possible switch configurations for the SSA when a station, channel, or band is changed to reduce search times and provide improved SSA performance.

Please amend paragraph [0008] on page 3 as follows:

[0008] As seen in Figures 2A and 2B, known ~~FSS~~ frequency-selective-surfaces (FSS), which are seen generally at 200a, 200b may include a plurality of dipole elements 201 (Figure 2A) arranged in a generally vertical direction or a planar slot array 203 (Figure 2B) in a conductive surface. When the dipole elements 201 are resonating, the array is completely reflective, and, when the slot elements 203 are resonating, the conductive surface is completely transparent. As a result, the dipole array 201 acts as a

spatial band-rejection filter and the planar slot array 203 acts as a spatial band-pass filter. Accordingly, when transmitting radiation is blocked, signals relating to a certain polarization, such as vertical, horizontal, LHCP, right-hand-circular polarization (RHCP), or the like, are reflected, transmitted, or absorbed by the FSS.

Please amend paragraph [0014] on page 4, as follows:

[0014] Figures 2A and 2B illustrate ~~illustrates~~ known frequency-selective surfaces (FSS);

Please amend paragraph [0018] on page 4, as follows:

[0018] Figures 6A-6H illustrate ~~illustrates~~ examples of element geometries applicable to the FSS in Figures 3-5.

Please amend paragraph [0021] on page 6, as follows:

[0021] In operation, a transmitter/receiver 304, 404, 504 receives a radiated electromagnetic signal, such as an RF signal, via the antenna 302, 402, 502 over line 307, 407, 507. Depending on the particular application, the radiated electromagnetic signal can be of any of a variety of types, including but not limited to AM, FM, SDARS, GPS, DAB, PCS/AMPS, RKE, TPM, and other frequency bands, such as, for example, a UHF or VHF television signal, or the like. Although illustrated as a single antenna element, the antenna 302, 402, 502 may include a dual antenna element for receiving, in one example, terrestrial-repeated and celestial signals in an SDARS application, or, alternatively, the antenna 302, 402, 502 may be a self-structuring antenna (SSA) as described in currently pending application serial number ~~XX/XXX,XXX~~ 10/763,910 and DP-309795 that receives any desirable radiated electromagnetic signal(s). If the antenna 302, 402, 502 is a SSA, the SSA antenna 302, 402, 502 may ~~utilizes~~ utilize the elements seen at reference numerals 304-310 in a similar manner as described in Attorney Docket Number DP-309795 / U.S. Application Serial Number ~~XX/XXX,XXX~~ 10/763,910.

Please amend paragraph [0022] on page 6, as follows:

[0022] A switch controller 308, 408, 508 provides control signals to ~~the~~ switches 305, 405, 505 to selectively open or close the switches 305, 405, 505 to implement particular surface configurations. The switch controller 308, 408, 508 is operatively coupled to the switches 305, 405, 505 via control lines 319, 419, 519. The switch controller 308, 408, 508 is also operatively coupled to a memory module 310, 410, 510 via a bus 317, 417, 517. The memory module 310, 410, 510 stores surface configurations or switch states and is addressable using lines 313, 413, 513 from an algorithm processor 306, 406, 506 or lines 315, 415, 515 from the transmitter/receiver 304, 404, 504. Algorithm processor 306, 406, 506 is interconnected with transmitter/receiver 304, 404, 504 by a line 309, 409, 509. It should be noted that the memory module 310, 410, 510 need not store all possible surface configurations or switch states. For many applications, it would be sufficient for the memory module 310, 410, 510 to store any desirable amount of configurations, such as, for example, up to several hundred possible surface configurations or switch states.

Please amend paragraph [0023] on pages 6 through 7, as follows:

[0023] Any of a variety of conventional memory devices may comprise the memory module 310, 410, 510 including, but not limited to, RAM devices, SRAM devices, DRAM devices, NVRAM devices, and non-volatile programmable memories, such as PROM devices and EEPROM devices. Alternatively, the memory module 310, 410, 510 may also include a magnetic disk device or other data storage medium. The memory module 310, 410, 510 can store the surface configurations or switch states using any of a variety of representations. In some embodiments, each switch 305, 405, 505 may be represented by a bit having a value of 1 if the ~~switch305~~ switch 305, 405, 505 is open or a value of 0 if the switch 305, 405, 505 is closed in a particular surface configuration. Accordingly, each surface configuration is stored as a binary word having a number of bits equal to the number of switches 305, 405, 505 included within the surface 301, 401, 501. The surface 301, 401, 501 may include any desirable amount of switches 305, 405, 505 and switching elements 303, 403, 503. For example, if seventeen switches 305, 405, 505 are included in the surface 301, 401, 501, each surface configuration would be represented as a 17-bit binary word.

Please amend paragraph [0028] on page 9, as follows:

[0028] Additionally, a feedback sensor, such as a sensor antenna 314, 414, 514, may be connected to the transmitter/receiver 304, 404, 504 at line 321, 421, 521. Essentially, according to one embodiment, the sensor antenna 314, 414, 514 provides an indication of SSFSS system 300, 400, 500 performance. The feedback signal provided over line 321, 421, 521 may be used by a microprocessor, the memory module 310, 410, 510, the algorithm processor 306, 406, 506, or switch controller 308, 408, 508 to appropriately alter the SSFSS surface 301, 401, 501 by opening and closing the various switches 305, 405, 505. In another embodiment, the sensor antenna 314, 414, 514 may harvest environmental condition data, such as for example, position data from, for example, GPS. More specifically, in an implementation example, the sensor antenna 314, 414, 514 may supplement the SSFSS system 300, 400, 500 with data corresponding to the vehicle's position to be utilized when the vehicle encounters a lossy reception area, such as for example, when the signal is obstructed by an area with trees or tall buildings, or alternatively, when the vehicle is pitched on a hill, effecting the elevation angle of the antenna. As a result, the SSFSS system 300, 400, 500 may cross-reference the GPS data with the above-described antenna data to cause the controller 308, 408, 508 to register a surface configuration that gives best results for the particular location or environmental condition of the SSFSS system 300, 400, 500.